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EMC Corporation c/o WOLF, GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206				
EXAMINER				
MACILWINEN, JOHN MOORE JAIN				
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2142				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/727,193

**Applicant(s)**

BRADY ET AL.

**Examiner**

John M. MacIwinen

**Art Unit**

2142

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 and 82-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 and 82-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)  
Paper No(s)/Mail Date 3/22/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 27 – 39 and 82 – 94 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on paragraphs 37, 40 and 42 of Applicant's disclosure, it appears that said claims may be embodied solely in software.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 10, 14, 23, 27, 36, 82 and 91 are rejected under 35 U.S.C. 102(e) as being anticipated by Khanolkar et al. (US 7,127,743 B1).
5. Regarding claim 1, Khanolkar shows in a computer system comprising a plurality of nodes interconnected for communication via a network, a method including acts of:

(A) capturing, in a data structure (col. 5 line 65 – col. 6 line 22), a notification provided by a node on the network, the notification comprising at least a portion of a transmission by the node, the transmission describing a network event (col. 2 lines 10 - 67, col. 3 lines 57 - 65, col. 4 lines 15 -30);

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(B) identifying a data element within the notification (col. 6 lines 2 – 8, col. 7 lines 1 – 3);

(C) updating an index, based on the data element, with an indication of a location within the data structure where the data element is recorded (col. 2 lines 63 – 67, col. 4 lines 50 – 55, col. 7 lines 1 – 13).

6. Regarding claim 14, Khanolkar shows at least one computer-readable medium encoded with instructions which, when executed by a computer, perform a method in a computer system comprising a plurality of nodes interconnected for communication via a network, a method including acts of:

(A) capturing, in a data structure (col. 5 line 65 – col. 6 line 22), a notification provided by a node on the network, the notification comprising at least a portion of a transmission by the node, the transmission describing a network event (col. 2 lines 10 – 67, col. 3 lines 57 – 65, col. 4 lines 15 – 30);

(B) identifying a data element within the notification (col. 6 lines 2 – 8, col. 7 lines 1 – 3);

(C) updating an index, based on the data element, with an indication of a location within the data structure where the data element is recorded (col. 2 lines 63 – 67, col. 4 lines 50 – 55, col. 7 lines 1 – 13).

7. Regarding claim 27, Khanolkar shows a system for monitoring activity occurring in a computer system comprising a plurality of nodes interconnected for communication via a network, the system comprising:

a capture controller, said capture controller capturing, in a data structure (col. 5 line 65 – col. 6 line 22), a notification provided by a node on the network, the notification comprising at least a portion of a transmission by the node, the transmission describing a network event (col. 2 lines 10 – 67, col. 3 lines 57 – 65, col. 4 lines 15 – 30);

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an identification controller, said identification controller identifying a data element within the notification (col. 6 lines 2 – 8, col. 7 lines 1 - 3);

an update controller, said update controller updating an index, based on the data element, with an indication of a location within the data structure where the data element is recorded (col. 2 lines 63 – 67, col. 4 lines 50 - 55, col. 7 lines 1 - 13).

8. Regarding claim 82, Khanolkar shows system for monitoring activity occurring in a computer system comprising a plurality of nodes interconnected for communication via a network, the system comprising:

means for capturing, in a data structure, a notification provided by a node on the network, the notification comprising at least a portion of a transmission by the node, the transmission describing a network event (col. 2 lines 10 - 67, col. 3 lines 57 - 65, col. 4 lines 15 -30);

means for identifying a data element within the notification (col. 6 lines 2 – 8, col. 7 lines 1 - 3);

means for updating an index, based on the data element, with an indication of a location within the data structure where the data element is recorded (col. 2 lines 63 – 67, col. 4 lines 50 - 55, col. 7 lines 1 - 13).

9. Regarding claims 10, 23, 36 and 91, Khanolkar further shows wherein the transmission comprises at least one of a SYSLOG message, an SNMP message, a NetFlow message and a TCP packet (Khanolkar, col. 2 line 40 and col. 5 lines 10 – 50).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 3, 5, 6, 15, 16, 18, 19, 28, 29, 31, 32, 83, 84, 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Martenson (US 6,219,708 B1).

12. Regarding claims 2, 15, 28 and 83, Khanolkar shows claims 1, 14, 27 and 82. Khanolkar does not explicitly show storing the data structure in a non-volatile storage.

Martenson shows storing the data structure in a non-volatile storage (col. 6 lines 43 - 55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar with that of Martenson in order to ensure that the data formulated, filtered and processed by the method of Khanolkar is archived for future use on a common and well-understood storage mechanism.

13. Regarding claims 3, 16, 29 and 84, Khanolkar in view of Martenson further show storing the data structure in a file system in the non-volatile storage (Martenson, col. 6 lines 43 - 55).

14. Regarding claims 5, 18, 31 and 86, Khanolkar in view of Martenson further show an act comprising classifying the notification based on the data element, and wherein the act (A) further comprises storing the data structure in the file system based on the classification (Khanolkar, col. 6 lines 22 - 23, col. 6 line 65 - col. 7 line 3).

15. Regarding claims 6, 19, 32 and 87, Khanolkar in view of Martenson further show wherein the data element comprises an IP address of the node (Khanolkar, col. 7 lines 1 - 13, col. 4 lines 50 - 55).

16. Claims 4, 17, 30 and 85 rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Martenson as applied to claims 3, 16, 29 and 84 above, and further in

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view of Richard et al. (US 2005/0015461 A1), hereafter Richard.

Khanolkar in view of Martenson show claims 3, 16, 29 and 84.

Khanolkar in view of Martenson do not explicitly show the file system is a hierarchical file system.

Richard shows where the file system is a hierarchical file system ([111]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar in view of Martenson with that of Richard in order to utilize a common type of file system (Richard, [111]).

17. Claims 7, 20, 33 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar further in view of Microsoft Computer Dictionary, 5<sup>th</sup> Edition.

18. Regarding claims 7, 20, 33 and 88, Khanolkar shows claim 1.

Khanolkar does not explicitly show where the data structure is a file.

Microsoft Computer Dictionary shows files (pgs. 2 - 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar with that of Microsoft Computer Dictionary in order to utilize common ideas in computing environments.

19. Claims 8, 9, 21, 22, 34, 35, 89 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Martenson as applied to claims 2, 15, 28 and 83 above further in view of Microsoft Computer Dictionary, 5<sup>th</sup> Edition.

20. Regarding claims 8, 21, 34 and 89, Khanolkar in view of Martenson show claims 2, 15, 28 and 83.

Khanolkar in view of Martenson do not explicitly show an act of compressing the data structure.

Microsoft Computer Dictionary shows compression of files, such as data structures (pgs. 2-3 and 4 -5).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar and Martenson with that of Microsoft Computer Dictionary in order to utilize common ideas in computing environments, as well as to optimize the storage size of the data structure.

Khanolkar in view of Martenson and Microsoft Computer Dictionary thus show claims 8, 21, 34 and 89.

21. Regarding claims 9, 22, 35 and 90, Khanolkar in view of Martenson and Microsoft Computer Dictionary further show act of creating a digital signature for the data structure (Microsoft Computer Dictionary, pgs. 2 – 3 and 6).

22. Claims 11, 12, 13, 24, 25, 26, 37, 38, 39, 92, 93 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Special Edition Using Java 2 Enterprise Edition, hereafter Wutka.

23. Regarding claims 11, 24, 37 and 92, Khanolkar shows claims 1, 14, 27, 82, as well as using a relational database (col. 4 lines 10 - 30).

Khanolkar does not show (D) accessing the index to determine, based on the indication, the location of the data element within the data structure; and (E) accessing the data element at the location.

Wutka shows (D) accessing the index to determine, based on the indication, the location of the data element within the data structure; and (E) accessing the data element at the location (pgs. 2 – 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar with that of Wutka in order to utilize standard development practices for working with relational databases.



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24. Regarding claims 12, 25, 38 and 93, Khanolkar in view of Wutka further show creating a summary based at least in part on a presence of the data element within the notification (Wutka, pgs. 2 - 4, Khanolkar col. 2 lines 63 - 67 and col. 4 lines 50 - 55).
25. Regarding claims 13, 26, 39 and 94, Khanolkar in view of Wutka further show accessing the summary to determine the presence of the data element within the data structure (Wutka pgs. 2- 4).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. MacIlwinen whose telephone number is (571) 272-9686. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Caldwell/  
Supervisory Patent Examiner, Art  
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